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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/633,854

08/04/2003

Richard E. Stamper

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EXAMINER

JACKSON, BRANDON LEE

ART UNIT

PAPER NUMBER

3772

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/633,854	Applicant(s) STAMPER ET AL.	
	Examiner BRANDON JACKSON	Art Unit 3772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/31/2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to amendments/arguments filed 12/31/2007.

Currently, claims 1-25 are pending in the instant application.

Response to Amendment

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Election/Restrictions

The restriction requirement as set forth in the Office Action mailed 3/22/2007 is withdrawn.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 17, and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant claims the device is "configured to simultaneously adapt to changes in the geometry of the head **without manual intervention** such that the head remains generally fixed over a period of time." However, in the instance where this functional language is claimed no structure has been claimed to illustrate how this is possible. Therefore, in order for one of ordinary

skill in the art to understand how this limitation is accomplished one would need structure, such as the pins and compliant link. Merely disclosing the constraint are connected to the links that engage the head does not allow absolute understanding of how the device is adjusted without manual intervention.

Claim 10 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant claims the "...the head remains generally fixed to the head..."

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

With respect to the limitation of simultaneous adaptation to the geometry of the head without manual intervention, the Examiner has not considered this limitation in the independent claims because it cannot be determined how this limitation is accomplished, as stated in the 112 rejection above.

Claims 1-11, and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eingorn (U.S. Patent 4,667,660). Eingorn discloses a link system (10) comprising a plurality of links (fig. 1), a first constraint (25) coupled to a first link (20) adapted to engage the left side of the head, a second constraint (25) coupled to a second link (24) adapted to engage the right side of the head, wherein the link system is configured to exert force on the head (col. 5, lines 55-63) through the first and second links (20, 24); is capable of being adapted to the geometry of the head such that it remains fixed over a period of time. The constraints (25) are pins (112) including pin heads (186). The first and second links (20, 24) are configured to support a plurality of constraints (110). The through holes (110) allow for a plurality of constraints to be coupled with the first and second links (20, 24). The third link (18) is coupled to the first link (20) at a first joint (126), wherein the first link (20) has one degree of freedom relative to the third link (18). The second link (24) is coupled to the fourth link (22) at a second joint (mirror image of 126), wherein the second link (24) has on degree of freedom relative to the fourth link (22). The fourth link (22) is coupled to the third link (18) at a third joint (128), wherein the third link (18) has one degree of freedom relative to the fourth link (22). Eingorn fails to disclose a plurality of first and second constraints. It would have been obvious to one of ordinary skill in the art at the time of the invention

to add additional constraints to the first and second links, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8. Moreover, the first and second links (20, 24) are configured with through holes (110) that more constraints (25) can be coupled through. The link system (10) can be attached to other cervical traction apparatus, such as vest (col. 8, lines 30-32), which are well known in the art to be torso restraints.

Claims 12-17, 19-22, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eingorn (U.S. Patent 4,667,660) in view of McFadden (U.S. Patent 6,179,846). Eingorn substantially discloses the claimed invention; see claims 1, 3, 4, and 8 rejections above. Also, Eingorn discloses that the link system is coupled with a torso restraint to fix the head at a certain position relative to the torso (col. 8, lines 53-61). The torso restraint is coupled (col. 8, lines 30-32) to the third link (18). Eingorn fails to disclose a compliant member comprising a compliant link and force appliers configured to simultaneously adjust the force applied to the constraints. However, McFadden teaches a link system (10) comprising a compliant member (fig. 1) comprising a compliant link (30) and a force applier (50). The force applier is coupled (14) to the third link (18) and the compliant link (30) is coupled to the fourth link (16). Through adjustment of the force applier (50) the force applied to the constraints (44) may be simultaneously adjusted and adapted to the geometry of the head of a person. It would have been obvious to one of ordinary skill in the art at the time of the invention

to modify the Eingorn device with the compliant member, as taught by Mcfadden, in order to allow for easy adjustment of size and amount of pressure of the constraints.

Eingorn/McFadden fail to disclose the device is automatically adapted to changes in the geometry of the head such the head remains fixed over the period of time. However, Eingorn/Mcfadden teach a link system (10) that may be manually adjusted to changes in geometry of the head such that the head remains fixed over a period of time. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the adjustment of the device to be automated, since it has been held that broadly providing a mechanical or automatic means to replace manual activity, which as accomplished the same result, involves only routine skill in the art. *In re Venner*, 120 USPQ 192. Orthopedic devices are many times automated in order to reduce treatment error while adjusting the orthopedic device.

With respect to claims 20-22, Eingorn/Mcfadden teaches the elements of the claimed invention; therefore the method steps would be obvious because they would have resulted from the use of the Eingorn/Mcfadden device. With respect to claim 20, the period of time of at least eight weeks provides no advantage, is not used for a particular purpose, and does not solve a stated problem. The Eingorn/Mcfadden device would function equally as well over a period of time of at least eight weeks. Therefore, it is a mere design choice and would be obvious to one of ordinary skill in the art at the time of the invention to modify the Eingorn/Mcfadden device to be used over a period of time of at least eight weeks.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eingorn (U.S. Patent 4,667,660) and McFadden (U.S. Patent 6,179,846), further in view of Guigui et al. (U.S. Patent 5,674,186). Eingorn/McFadden substantially discloses the claimed invention; see claim 17 rejection above. Eingorn/McFadden fails to disclose a third link that extends from the left half of the head to the right half of the head.

However, Guigui teaches a link system (fig. 1) comprising links (1) that extend from the left side of the head to the right side. It would be obvious to one of ordinary skill in the art to extend the third and fourth links of Eingorn/McFadden to meet in the rear of the head, as taught by Guigui, in order to provide more stability in the device and insure the constraint are at the same height on either side of the head.

Allowable Subject Matter

The Examiner believes the application is potentially allowable with the addition of the structure that allows the device to adjust to the geometry of the head without manual intervention. One way this could potentially be accomplished is by adding the features of claims 2-5 to the independent claims because of the seemingly lack of head restrain devices that have pins that remain engaged to the head while a compliant link allows the device to change shape without removal of the device from the user's head.

However, the Examiner understands this is not the only manner in which this could be accomplished and is open to other suggestions from the Applicant.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRANDON JACKSON whose telephone number is (571)272-3414. The examiner can normally be reached on Monday - Friday 8-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patricia Bianco can be reached on (571)272-4940. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Brandon Jackson/
Examiner, Art Unit 3772

BLJ

/Patricia Bianco/
Supervisory Patent Examiner, Art Unit 3772